

Appendix 2

Affected Water Users (AWUs)

List of Affected Water Users

- **Amherst Country Club**
- **Greenville Water Works**
- **Greenville Waste Water Treatment Facility**
- **Milford Waste Water Treatment Facility**
- **Milford Fish Hatchery**
- **Milford Water Works**
- **Monadnock Mountain Spring**
- **Pennichuck Water, Amherst Village District Well**
- **Pennichuck Water, Badger Hill**
- **Pennichuck Water, Souhegan Woods Well**
- **Peter De Bruyn Kops**
- **Pike Industries/Wilton Quarry**
- **Ponemah Green Golf Course**
- **Souhegan Woods Golf Club**
- **Wilton Water Works**
- **Wilton Waste Water Treatment Facility**

User: Amherst Country Club
Address: 72 Ponemah Rd, Amherst, 03031

Reg Number: 20190

Contact: Steve Wilson
Phone: 673-6351
Fax:
Email:

Intake Structure: two 7 1/2 hp sumps resting 8-10" of bottom of the river

Water Intake: 20190-D01: X coordinate: 999153.375, Y coordinate: 119360.000
20190-S01: X coordinate: 999451.000, Y coordinate: 119967.703

Water Storage: none

Water Use Frequency: Annual use for irrigation, May to October

Average Water Use by month (thousand gallons): 20190-D01 not reporting, 20190-S01 from 2004 NHDES data, yearly avg. = 133.359 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	0	625	5,575.1	7,111.9	5,112.8	6,048.9	64.4	0	0

Days of Water Use: water is used on an as needed basis, typically spring, summer and fall, weather dependent, varying from every day to twice a week

Hours of Water Use: 6 pm to 7 am

Description of Use: to water the golf course, approx. 170 acres

Staffing: Golf course is staffed normal working hours, 5 am to 4 pm weekdays, 5 am to 10 pm weekends

Water Use Measured: meter

Water Use Records: monthly, kept on data sheets

Return Flow/Water reuse: none

Conservation Measures Used: moisture levels are checked daily and water is used only when needed

Stream/River Gage: a stream gage was made to determine local flood stage, also use the stream gage in the Merrimack when taking water samples and checking river levels

Planned shutdowns/changes: none

Other Information:

Water Use Management Possibilities:

Comment: Amherst manages Ponemah as well. Only one withdrawal for both courses, at Amherst.

User: Greenville Water Works
Address: PO Box 343, Greenville, 03048

Reg Number: 20047

Contact: Carla Mary, Woodard and Curran
Phone: 603-878-1338 (to Facility)
Fax:
Email:

Intake Structure:

Water Intake: 20047-S03, X-coord. 939368.625, Y-coord. 108162.297, 20047-S02 not reported since 1993, 20026-S01 not reported since 1999, 20047-D01 not reported

Water Storage:

Average Water Use by month (thousand gallons): from NHDES 2004 data for 20047-S03, yearly average: 113.076 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3646.1	3219	3696.8	3368.1	1923.3	1922.7	4367.7	4605.1	3802.4	3821.2	3380.4	3633.1

Days of Water Use:

Hours of Water Use:

Description of Use:

Staffing:

Water Use Measured:

Water Use Records:

Return Flow/Water reuse:

Conservation Measures Used:

Stream/River Gage:

Planned shutdowns/changes:

Other Information:

Comment: Pilgrim Foods takes from Greenville rather than separate withdrawal (check this)

User: Greenville Waste Water Treatment Facility
Address: PO Box 343, Greenville, 03048

Reg Number: 20086

Contact: Carla Mary, Woodard and Curran
Phone: 603-878-1338 (to Facility)
Fax:
Email:

Intake Structure:

Water Intake: 20086-D01 X-coord. 946659.875, Y-coord. 99138.977, 20086-S01, labeled as collection system by NHDES, had no data reported for 2004 but a yearly avg of 282 for 2003

Water Storage:

Average Water Use by month (thousand gallons): from NHDES 2004 data for 20086-D01, yearly average: 165.354 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4617.9	3180.3	4595.8	8063.1	7019.7	4246.6	4424.8	4185.7	4821.2	5005.5	4173.9	6184.9

Days of Water Use:

Hours of Water Use:

Description of Use:

Staffing:

Water Use Measured:

Water Use Records:

Return Flow/Water reuse:

Conservation Measures Used:

Stream/River Gage:

Planned shutdowns/changes:

Other Information:

User: Milford Waste Water Treatment Facility
Address: 1 Union Square, Milford, 03055

Reg Number: 20092

Contact: Larry Anderson
Phone: 603-673-9441
Fax:
Email: Landerson@milford.nh.gov



Milford treatment plant outfall, 6-29-04

Intake Structure:

Water Intake: 20092-D01, X coord: 995352.875, Y coord: 119661.602
20092-S01, no coordinates listed

Water Storage:

Average Water Use by month (thousand gallons): from NHDES 2004 data for 20092-D01,
yearly average: 1307.9 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40960	31000	41690	69500	47340	36700	31430	31210		32650	32180	44810

*no data reported for Sept, yrly avg for 2003 is 1416.2 with Sept reported

20092-S01, yearly average: 1233.7

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
49080	28990	38530	66090	41060	31960	26360	27090		30990	30870	43500

*no data reported for Sept, yrly avg for 2003 is 1321.8 with Sept reported

Days of Water Use:

Hours of Water Use:

Description of Use:

Staffing:

Water Use Measured:

Water Use Records:

Return Flow/Water reuse:

Conservation Measures Used:

Stream/River Gage:

Planned shutdowns/changes:

Other Information:

User: Milford Fish Hatchery
Address: RR3 Box 364-408, Milford, 03055

Reg Number: 20218

Contact: Robert S. Fawcett
Phone: 603-271-2501
Fax:
Email:

Intake Structure: two gravel packed wells at a depth of approximately 65 to 80 feet

Water Intake: 20218-S01 Well #4 River Well, X coord: 978067.000, Y coord: 126240.102
20218-S02 Well #1 Field Well, X coord: 978886.625, Y coord: 127151.000

Water Storage:



fish hatchery outfall pipe, 6-28-04

Average Water Use by month (thousand gallons): S02, from 2004 NHDES data,
avg = 729.694 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
23436	21924	23436	19440	20088	19440	24552	24552	23760	22520	21600	22320

S01, from 2004 NHDES data, avg = 1743.18

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
48104	45936	49108	58320	60264	58320	51336	51336	49680	55800	54000	55800

Days of Water Use: every day

Hours of Water Use: all times

Description of Use: well water is pumped to feed the Milford State Fish Hatchery

Staffing: Facility is staffed 24/7

Water Use Measured: meter

Water Use Records: weekly records are kept, a quarterly report is sent to DES

Return Flow/Water reuse: 100% returned, water is pumped to the Head of the Facility then runs through pools, then returned to the river a short distance from where it is pumped

Conservation Measures Used: when the fish population allows, water is shut off from one well, typically late spring/early summer

Stream/River Gage: none

Planned shutdowns/changes: none

Other Information:

Water Use Management Possibilities:

User: Milford Water Works
Address: 1 Union Square, Milford, 03055

Reg Number: 20100

Contact: Larry B. Anderson
Phone: 603-673-9441
Fax:
Email:

Intake Structure: Milford water supply is from 2 gravel packed wells located near the Souhegan River, well #1 700 gpm, well #2 400 gpm

Water Intake: NHDES lists 20100-S01 as Curtis Wells #1 and #2, X coord: 993936.375, Y coord: 121078.203

Water Storage: 1.25 m gallons

Average Water Use by month (thousand gallons): 20100-S01, from NHDES data, 2004, yearly average: 915.143 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
26331	24103	26111	25398	30086	34527	0	0	0	0	0	0

Days of Water Use: all week

Hours of Water Use: all times

Description of Use: for town water supply

Staffing: Facility is fully staffed M-F

Water Use Measured: meter,

Water Use Records: via SCADA

Return Flow/Water reuse: approx. 90% of withdrawal is returned 5 miles downstream and is measured by partial flume with ultrasonic meter at wastewater facility

Conservation Measures Used:

Stream/River Gage:

Planned shutdowns/changes: plans to add another well to the system

User: Monadnock Mountain Spring
Address: PO Box 518, Mansur Road, Wilton, 03086

Reg Number: 20621

Contact: Vincent Gerbino
Phone: 603-654-2728
Fax:
Email:

Intake Structure: Two adjacent wells

Water Intake: NHDES lists wells as 20621-S01, Mansur Road Spring Well, X coord: 959956.625, Y coord: 118457.000 and
20621-S02, Intervale Road Spring Well, X coord: 958912.313, Y coord: 117547.000

Water Storage: 30,000 gallons



Monadnock wells, 6-28-04

Average Water Use by month (thousand gallons): from NHDES 2004 data, S01 average: 46.968 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3255	3255	3255	929	929	929	825	825	825	720	720	720

From NHDES 2004 data, S02, average: 46.968

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3255	3255	3255	929	929	929	825	825	825	720	720	720

Days of Water Use: Sunday through Friday

Hours of Water Use: 9 am to 6 pm

Description of Use: Water is bottled for human consumption.

Staffing: Facility is fully staffed M-F with @ 50 people, approx. 10-20 people on Sunday

Water Use Measured: meter, via units produced

Water Use Records: Daily observations have been recorded on data sheets

Return Flow/Water reuse: Water cannot be reused.

Conservation Measures Used: “normal measures”

Stream/River Gage: none

Planned shutdowns/changes: No planned changes

Other Information: no direct draw from river; states “years of data to show that springs are not influenced by surface water”

Water Use Management Possibilities:

User: Pennichuck Water, Amherst Village District Well
Address: 25 Manchester Street
PO Box 1947
Merrimack, NH 03054-1947

Reg Number: 20000

Contact: Donald L. Ware, Senior VP, Operations
Phone: 603-913-2330
Fax: 603-913-2362
Email:

Intake Structure: A gravel packed well, 20000-S01

Water Intake: NHDES well 20000-S01, X coord: 997284.313, Y coord: 130090.000

Water Storage: 225,000 gallons

Average Water Use by month (thousand gallons): from NHDES 2004 data, average: 5.921
tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
253.859	3.63	730	12.99	0	0	0	38.3	0	0	38.89	0

Days of Water Use: Water is used only on an emergency basis.

Hours of Water Use: NA

Description of Use: Water is used on an emergency basis due to water quality issues.

Staffing: Well operation and monitoring performed via SCADA system that is viewed at Pennichuck's Water Treatment Plant in Nashua, NH and monitored 24-7. When the station is running it is checked daily.

Water Use Measured: meter

Water Use Records: Operations are historically trended, daily totals are logged by SCADA system as well as hours and rate of pumping.

Return Flow/Water reuse: Water is not/cannot be reused. All businesses using water from the well system are on septic systems that are within the Souhegan River Watershed.

Conservation Measures Used: annual conservation mailings

Stream/River Gage: none

Planned shutdowns/changes: No planned changes

Other Information: When this well is needed, it is because of a loss of the main supply and as such when it is needed we must be able to turn it on in order to provide continued domestic and fire protection service.

Water Use Management Possibilities:

User: Pennichuck Water, Badger Hill
Address: 25 Manchester Street
PO Box 1947
Merrimack, NH 03054-1947

Reg Number: 20781

Contact: Donald L. Ware, Senior VP, Operations
Phone: 603-913-2330
Fax: 603-913-2305
Email:

Intake Structure: Survey reply lists 3 bedrock wells, NHDES records indicate only 2 from 2004

Water Intake: 20781-S02 and 20781-S03, no water use reported to NHDES for S02 since inception

Water Storage: 80,000 gallons

Average Water Use by month (thousand gallons): 20781-S03, from NHDES 2004 data, yearly average: 12.418 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	244.5	416.1	546.6	439.8	482.7	585.1	258.6	214.9	226.8

Days of Water Use: Every day

Hours of Water Use: at all times- start and stop times depend on the season, wells run an average of 2.6 hrs during the non-irrigation season and an average of 5.3 hours during the irrigation season

Description of Use: Water is used to meet domestic and fire protection for 106 homes in the Badger Hill subdivision in Milford, NH.

Staffing: Staff visit the well once a week. Critical data on station gathered at station and entered into database at Nashua treatment plant.

Water Use Measured: meter

Water Use Records: weekly records

Return Flow/Water reuse: Water is not/cannot be reused. All homes using water from the well system are on septic systems that are within the Souhegan River Watershed.

Conservation Measures Used: no automatic inground sprinklers allowed by subdivision covenants, outside water usage on an odd/even basis.

Stream/River Gage: none

Planned shutdowns/changes: No planned changes

User: Pennichuck Water, Souhegan Woods Well
Address: 25 Manchester Street
PO Box 1947
Merrimack, NH 03054-1947

Reg Number: 20659

Contact: Donald L. Ware, Senior VP, Operations
Phone: 603-913-2330
Fax: 603-913-2362
Email:

Intake Structure: Water is withdrawn from wells adjacent to the Souhegan River. The well is run as required to keep the atmospheric storage tank full.

Water Intake: 20659-S01, listed as GPW 1 and GPW 4, X coord: 1010700.000, Y coord: 122205.203

Water Storage: 50,000 gallons

Average Water Use by month (thousand gallons): from NHDES 2004 data, yearly average: 21.704 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
666	553	534	711	1903	531	312	268	229	822	653	762

Days of Water Use: Every day

Hours of Water Use: at all times- the well runs an average of 4.9 hrs/day during non-irrigation season and an average of 16.9 hrs/day during the irrigation season.

Description of Use: Water is used to meet domestic and fire protection for 115 homes in the Souhegan Woods subdivision in Amherst, NH.

Staffing: Staff visit the well once a week. Station operations are monitored by a SCADA system that is viewed at Pennichuck's Water Treatment Plant in Nashua, NH.

Water Use Measured: meter

Water Use Records: Historical trends based on 2-minute averages of well production, kept electronically

Return Flow/Water reuse: Water is not/cannot be reused. All homes using water from the well system are on septic systems that are within the Souhegan River Watershed.

Conservation Measures Used: odd/even irrigation, annual conservation mailings

Stream/River Gage: none

Planned shutdowns/changes: No planned changes

User: Peter De Bruyn Kops
Address: 427-3 Amherst Street 341, Nashua, 03063

Reg Number: 20383

Contact: Peter De Bruyn Kops
Phone: 603-881-8821
Fax:
Email:

Intake Structure: removable pipe with foot valve and coarse strainer

Water Intake: 20383-S01, X coord: 1003178.000, Y coord: 118451.898

Water Storage: none

Average Water Use by month (thousand gallons): from NHDES 2003 data, yearly average:
0 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	0	0	0	0	0	0	0	0	0

Days of Water Use: potentially every day, fall and summer

Hours of Water Use: during dry periods, generally during daylight hours

Description of Use: agriculture-crop irrigation and occasionally frost prevention

Staffing: farmer lives on the farm full time

Water Use Measured: time X # sprinklers X flow rate per sprinkler

Water Use Records: historical records are NHDES quarterly water reports, kept on data sheets

Return Flow/Water reuse: none directly returned, irrigation water may recharge groundwater, no reuse

Conservation Measures Used: experimented with plastic landscape fabric, aware of polymers that hold water and are intended to be mixed with the soil, they are expensive and fears unintended consequences of using them on a flood plain land, tough to remove once incorporated

Stream/River Gage: none

Planned shutdowns/changes: agriculture is entrepreneurial, plans change as crops change based on weather and customers

Other Information: rule of thumb is crops need about 1 inch of water per week, looking for predictable water supply, support for business flexibility, and low capital costs.

User: Pike Industries/Wilton Quarry
Address: 3 Eastgate Park Road, Belmont, NH 03220

Reg Number: 20281

Contact: Lawrence R. Major, Jr., NH EHS Manager Region 1
Phone: 603-527-5182
Fax: 603-527-5101
Email: lmajor@pikeindustries.com

Intake Structure: 8" intake 2 feet below the water surface

Water Intake: 20281-S01, X coord: 955803.125, Y coord: 134052.500

Water Storage: 1.5 million gallons

Average Water Use by month (thousand gallons): from NHDES 2004 data, yearly average: 65.39 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	0	1346.1	1575	3024	2403	2434.5	2286	2430	522

Days of Water Use: every day, most often during weekdays but sometimes on Saturday during periods of high demand for our products

Hours of Water Use: 7 am to 5 pm

Description of Use: water from Stoney Brook is used to wash construction grade aggregates and for dust suppression

Staffing: M-F day shifts, also occasionally on Saturdays

Water Use Measured: pump run time

Water Use Records: daily inspections are conducted for safety and operational purposes, reports to NHDES on a quarterly basis, information kept on data sheets

Return Flow/Water reuse: no direct returns to the river, some water may infiltrate our settling ponds and ultimately contribute to the Stoney Brook through groundwater, some water reused

Conservation Measures Used: low volume spray nozzles, wash water is recycled, stormwater is captured for dust control on quarry roads

Stream/River Gage: Pike does not have a stream gage. Have heard that there is one upstream of quarry on Stoney Brook.

Planned shutdowns/changes: Pike Industries Inc. reduced water use during the drought of '02 and have maintained that minimal use since. Minimal opportunities for further restrictions.

Other Information: a seasonal business operating from April to December generally, market forces typically create highest demand during the least rainy months, businesses that rely on products are paving contractors, septic installers, concrete manufacturers, building contractors

User: Ponemah Green Golf Course
Address: 54 Ponemah Rd, Amherst, 03031

Reg Number: 20624

Contact: Steve Wilson
Phone: 673-8259
Fax:
Email:

Intake Structure:

Water Intake: 20624-D01, X coord. 999153.375, Y coord. 119360.000 and 20624-S01, X coord. 999451.000, Y coord. 119967.703

Water Storage: none

Water Use Frequency: Annual use for irrigation, May to October

Average Water Use by month (thousand gallons): from 2004 NHDES data, 20624-D01 not reporting, 20624-S01 yearly avg. = This is the same withdrawal as Amherst CC See Amherst for data

Days of Water Use: water is used on an as needed basis, typically spring, summer and fall, weather dependent, varying from every day to twice a week

Hours of Water Use: 6 pm to 7 am

Description of Use: to water the golf course, approximately 20 acres

Staffing: Golf course is staffed normal working hours, 5 am to 4 pm weekdays, 5 am to 10 pm weekends

Water Use Measured: meter

Water Use Records: monthly, kept on data sheets

Return Flow/Water reuse: none

Conservation Measures Used: moisture levels are checked daily and water is used only when needed

Stream/River Gage: a stream gage was made to determine local flood stage, also use the stream gage in the Merrimack when taking water samples and checking river levels

Planned shutdowns/changes: none

User: Souhegan Woods Golf Club
Address: 65 Thorntons Ferry Road II, Amherst, 03031

Reg Number: 20523

Contact: Ryan Lane
Phone: 424-0910
Fax:
Email:

Intake Structure:

Water Intake: 20523-D01, groundwater well, Lat/Lon: 425037, 713422
20523-S01, surface water well taken from Souhegan River, Lat/Lon: 425005, 713354

Water Storage: none

Water Use Frequency: Annual use for golf course irrigation, April to October

Average Water Use by month (thousand gallons): 20523-S01 from 2004 NHDES data, avg.daily use = 61.126, adj. avg. daily use = 104.542

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	2143	3447	6147	2125	4917	2064	1529	0	0

Days of Water Use: water is used on an as needed basis, typically spring, summer and fall, weather dependent, varying from every day to twice a week

Hours of Water Use:

Description of Use:

Staffing:

Water Use Measured:

Water Use Records:

Return Flow/Water reuse: none

Conservation Measures Used:

Stream/River Gage:

Planned shutdowns/changes: none

Other Information:

Water Use Management Possibilities:

Comment:

User: Wilton Water Works
Address: PO Box 83, Wilton, NH

Reg Number: 20065

Contact: Charles McGettigan Jr. Water Commissioner
Phone: 603-654-6602
Fax:
Email:

Intake Structure: two wells

Water Intake: 20065-S01, Everett Well, X coord: 956674.125, Y coord: 115524.898
20065-S02, Abbott Well, X coord: 957345.188, 115827.797

Water Storage: 616,000 gallons in one tank

Average Water Use by month (thousand gallons): from NHDES 2004 data,
S01 yearly average: 100.85 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3264	2663	2746	2645	3091	3476	2703	0	0	443	6345	3381

S02 yearly average: 123.841

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2884	2449	2672	2761	3262	3494	4087	5828	6076	5496	0	2552

Days of Water Use: every day

Hours of Water Use: 24/7

Description of Use: WWW uses about 250,000 gallons of water for Wilton customers

Staffing: part time employees that tend to the system

Water Use Measured: meter

Water Use Records: daily since July 13, 1988, kept on data sheets

Return Flow/Water reuse: only when there are breaks in the system or when flush hydrants

Conservation Measures Used: every customer is metered

Stream/River Gage:

Planned shutdowns/changes: none.

User: Wilton Waste Water Treatment Facility
Address: PO Box 83, Wilton, 03086

Reg Number: 20426

Contact: Charles McGettigan Jr. Sewer Commissioner
Phone: 603-654-6602
Fax:
Email:

Intake Structure:

Water Intake: 20426-S01, no location listed and no water used, just a transfer line, no data reported to NHDES, 20426 also listed as using well 20092-D01 (Town of Milford), X coord: 995352.875, Y coord: 119661.602

Water Storage:

Average Water Use by month (thousand gallons): from NHDES 2004 data for 20092-D01, yearly average: 152.364 tgd

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4962.4	2894.1	3604	7848.6	6404.6	4847.4	2643.8	4232.8	4139.1	4831.5	3582	5575

Days of Water Use:

Hours of Water Use:

Description of Use:

Staffing:

Water Use Measured:

Water Use Records:

Return Flow/Water reuse:

Conservation Measures Used:

Stream/River Gage:

Planned shutdowns/changes:

Other Information: